



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/931,415	08/17/2001	Debabrata Ghosh	45283.2	3885

22828 7590 12/18/2002

EDWARD YOO C/O BENNETT JONES
1000 ATCO CENTRE
10035 - 105 STREET
EDMONTON, ALBERTA, AB T5J3T2
CANADA

EXAMINER

VO, HAI

ART UNIT	PAPER NUMBER
----------	--------------

1771

DATE MAILED: 12/18/2002

8

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/931,415

Applicant(s)

GHOSH ET AL.

Examiner

Hai Vo

Art Unit

1771

-- **Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --**
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 21-26 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08/17/2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3 and 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-20, drawn to a seal, classified in class 428, subclass 311.11.
 - II. Claims 21-26, drawn to a method of making a seal, classified in class 427, subclass various.
2. The inventions are distinct, each from the other because of the following reasons:

Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the product as claimed can be made by another and materially different process such as the one that impregnates a matrix of ceramic fibers into a composition comprising a plurality of solid particles.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.
3. During a telephone conversation with Ted Yoo on 12/05/2002 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-20. Affirmation of this election must be made by applicant in replying to this

Office action. Claims 21-26 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Objections

4. Claim 16 is objected to because of the following informalities: line 2, SOFC should be spelled out as solid oxide fuel cell. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 6, 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims contain improper Markush language. The term "comprising" should be changed to --consisting of--; the term "or" changed to --and--. Applicants may use alternative language such as wherein all or some of the ceramic fibers comprising alumina, zirconia, titania, magnesia or silica.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyamichi et al (US 5,512,351). It has been held that a recitation with respect to the manner in which a claimed seal is intended to be employed does not differentiate the claimed seal from a prior art prepreg satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987).
- Miyamichi discloses a prepreg material being prepared by impregnating an alumina fibers with a composition that comprises an alumina particle and a binder material (abstract, column 6, lines 53-56, and column 11, lines 45-48). The examiner interprets that the alumina particles would be inherently interspersed between the alumina fibers during the impregnating process. The prepreg is pressed using a hot press (column 12, lines 50-52). The ceramic particles comprising an alumina particle with an average particle size of 0.4 microns and silica particle with an average particle size of 0.02 microns. The solid particles are glass particles (column 6, line 58). With regard to claim 16, It is the examiner's position that the prepreg of Miyamichi is identical to the claimed article prepared by the method of the claim, because both articles use the same materials, having structural similarity (metal matrix composite reinforced with ceramic particles). Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or an obvious from a product of the prior art, the claim is unpatentable even though the prior product

was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show unobvious differences between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289,291 (Fed. Cir. 1983). The Miyamichi reference anticipates the claimed subject matter. It is noted that if the applicant intends to rely on Examples in the specification or in a submitted Declaration to show non-obviousness, the applicant should clearly state how the Examples of the present invention are commensurate in scope with the claims and how the Comparative Examples are commensurate in scope with Miyamichi.

9. Claims 1-8, and 13-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Ohkawa et al (US 5,468,358). It has been held that a recitation with respect to the manner in which a claimed seal is intended to be employed does not differentiate the claimed seal from a prior art metal matrix composite satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQ2d 1647 (1987). Ohkawa discloses a composite material being prepared by interspersing a plurality of alumina particles within the ceramic fiber matrix (abstract, column 2, line 63 et seq.; column 5, lines 53-54). The composite is pressed using a hot press (abstract). The ceramic particles comprising an alumina particle with an average particle size of less than 1 micron (column 5, lines 24-26). The solid particles are glass particles (column 3, lines 1-20). The binder material is the phenolic resin (example iv). With regard to claim 16, It is the examiner's position that the composite of Ohkawa is identical to the claimed article prepared by the

method of the claim, because both articles use the same materials, having structural similarity (metal matrix composite reinforced with ceramic particles). Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or an obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show unobvious differences between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289,291 (Fed. Cir. 1983). The Ohkawa reference anticipates the claimed subject matter. It is noted that if the applicant intends to rely on Examples in the specification or in a submitted Declaration to show non-obviousness, the applicant should clearly state how the Examples of the present invention are commensurate in scope with the claims and how the Comparative Examples are commensurate in scope with Ohkawa.

10. Claims 1-8, and 13-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Sanocki et al (US 5,955,177). Sanocki discloses a flexible mat comprising a nonwoven fabric having first and second major surfaces and a coating of metal oxide on only a portion of at least one of the major surfaces (abstract). The nonwoven fabric comprises ceramic oxide fibers such as glass fibers, aluminum fibers (column 5, lines 37-40). The coating of metal oxide is in a form of a

dispersion of colloidal metal oxide such as alumina with a particle size of less than 1 micron (column 8, lines 61 et seq.). The binder material includes an organic polymer (column 7, line 15). The nonwoven fabric can be compressed and heated by passing through laminating rollers (column 8, lines 43-45). With regard to claim 16, it is the examiner's position that the composite of Sanocki is identical to the claimed article prepared by the method of the claim, because both articles use the same materials, having structural similarity (metal matrix composite reinforced with ceramic particles). Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or an obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. *In re Thorpe*, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show unobvious differences between the claimed product and the prior art product. *In re Marosi*, 218 USPQ 289,291 (Fed. Cir. 1983). The Sanocki reference anticipates the claimed subject matter. It is noted that if the applicant intends to rely on Examples in the specification or in a submitted Declaration to show non-obviousness, the applicant should clearly state how the Examples of the present invention are commensurate in scope with the claims and how the Comparative Examples are commensurate in scope with Sanocki.

11. Claims 1-7, and 13-16 are rejected under 35 U.S.C. 102(a) as being anticipated by Mercuri et al (US 5,990,027). Mercuri discloses a sealing gasket formed of a flexible graphite sheet having embedded therein a dispersion of a plurality of ceramic fibers and ceramic particles (abstract). The ceramic fibers include glass fibers and aluminum fibers (column 2, line 59). The ceramic particles include alumina particles (column 2, line 59). The binder material includes a resin (abstract). The flexible graphite sheet is roll pressed into a sheet (column 3, line 6). With regard to claim 16, it is the examiner's position that the composite of Mercuri is identical to the claimed article prepared by the method of the claim, because both articles use the same materials, having structural similarity (metal matrix composite reinforced with ceramic particles). Even though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or an obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. ***In re Thorpe***, 227 USPQ 964, 966 (Fed. Cir. 1985). The burden has been shifted to the applicant to show unobvious differences between the claimed product and the prior art product. ***In re Marosi***, 218 USPQ 289,291 (Fed. Cir. 1983). The Mercuri reference anticipates the claimed subject matter. It is noted that if the applicant intends to rely on Examples in the specification or in a submitted Declaration to show non-obviousness, the applicant should clearly state how the

Examples of the present invention are commensurate in scope with the claims and how the Comparative Examples are commensurate in scope with Mercuri.


Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (703) 605-4426. The examiner can normally be reached on Tue-Fri, 8:30-6:00 and on alternating Mondays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

HV
December 10, 2002


TERREL MORRIS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700